

UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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DATE MAILED:

APPLICATION NO. FILING DATE 12/23/96	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. THE STATE OF THE STATE O
STAAS & HALSEY 700 ELEVENTH STREET NW SUITE 500 WASHINGTON DC 20001	MM11/0506	ART UNIT PAPER NUMBER 2872 05/06/98

Please find below and/or attached an Office communication concerning this application or pr ceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/772,259

Applicant(s)

Masaki et al

Examiner

Thong Q. Nguyen

Group Art Unit 2872



X Responsive to communication(s) filed on Feb 19, 1998	·
☑ This action is FINAL .	
 Since this application is in condition for allowance except for formal m in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 	
A shortened statutory period for response to this action is set to expire _ is longer, from the mailing date of this communication. Failure to respond application to become abandoned. (35 U.S.C. § 133). Extensions of tim 37 CFR 1.136(a).	d within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	is/are objected to.
☐ Claims are	subject to restriction or election requirement.
Application Papers	
\square See the attached Notice of Draftsperson's Patent Drawing Review,	PTO-948.
☐ The drawing(s) filed on is/are objected to by t	the Examiner.
☑ The proposed drawing correction, filed on Feb 19, 1998 is	Xapproved ⊡disapproved.
$\hfill\Box$ The specification is objected to by the Examiner.	
$\hfill\Box$ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
$\hfill \square$ Acknowledgement is made of a claim for foreign priority under 35	U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the prior	ity documents have been
☐ received.	
received in Application No. (Series Code/Serial Number)	
received in this national stage application from the Internatio	inal Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	·
Acknowledgement is made of a claim for domestic priority under 3	15 U.S.C. § 119(e).
Attachment(s)	
☐ Notice of References Cited, PTO-892	
☑ Information Disclosure Statement(s), PTO-1449, Paper No(s).	<u>9</u>
☐ Interview Summary, PTO-413	
 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152 	
□ Notice of informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLO	OWING PAGES

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DETAILED ACTION

Drawings

The corrected or substitute drawings were received on 02/19/98. These drawings are approved by the Examiner. It is also noted that applicant has filed a formal drawing which contains all of the corrections to the figures. This formal drawing is approved by the Drawing Review Branch.

Specification

The lengthy specification which is amended by the Amendment of 02/19/98 has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Suggestion

The following correction is suggested to claim 4.

In claim 4: on line 6, "an" should be changed to --the-- or --said-- (see the claim on line 2).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as described at pages 1-5 and illustrated in figures 11-12 in view of Gloor et al or Ishikawa et al (of record).

The optical device as provided by the prior art which is described in the present specification at pages 1-5 and illustrated in figs. 11-12 comprises 1) a light source apparatus having a lamp (7) and a reflector (8); 2) a light guide plate (2) having a light entrance surface, a bottom surface, an exit surface opposite from the bottom surface wherein the thickness of the light plate is decreased from the entrance surface towards an end surface away from the light source apparatus; 3) a reflecting plate (4) disposed adjacent to the bottom surface of the light guide plate; 4) a light control plate (5) having an emitting surface and an entrance surface which defines a prismatic surface which entrance surface faces the exit surface of the light guide plate; and 5) a diffusing plate (6) disposed on the top of the light control plate. As a result of such a structure, the optical device of the prior art meets almost the structure of the device as claimed in the present application. However, the optical device of the prior art does not disclose that at least part of the slopes of the prismatic surface of the light control plate defines a diffusing surface for the purpose of generating diffused light passing through the light control plate towards the emitting surface of the light control plate as claimed.

The use of a light control plate having a surface which defines a diffusing surface is disclosed in the art as can be seen in the light control device disclosed by either Gloor et al or Ishikawa et al. In particular, Gloor et al disclose an optical device having a light control plate

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having a plurality of projections in triangular shape wherein one slope of each projections is used as a diffusing surface. See columns 2-3 and fig. 2, element 26 which diffusing strips 10A-10K. It is also noted that the light diffusing surface is arranged to face the light source (9). In the same viewpoint, Ishikawa et al disclose a light control plate and teach the use of a light diffusing profile on a prismatic surface. See column 3 and figure 7. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device having a diffusing function as provided by the prior art by making the light diffusing profile on the prismatic surface of the light control plate as suggested by either Gloor et al or Ishikawa et al for the purpose of controlling a diffusing light beam and simultaneously reducing the components used in the optical device.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is noted that in response to the objection to the Information disclosure Statement (see previous Office action, Paper No. 6, page 1), applicant has submitted an English Abstract of each of the Japanese references cited in a previous form PTO-1449. As a result, the art cited by applicant has been considered. It is also noted that the citation of the U.S. patent No. 4,298,249 is lined-through because 1) this reference was considered and initialed by the Examiner in the previous Office action; and 2) duplication citation of reference needs to be lined-through to prevent from being printed twice on the face of the patent should this application pass to issue.

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2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exam. Nguyen whose telephone number is (703) 308-4814. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722 (or 7724).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Nguyen

04/29/98

'THONG NGUYEN
PRIMARY EXAMINER
GROUP 2800